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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/780,154	02/17/2004	Charles C. Lee	14614.01	1281

7590 10/03/2007  
Min (Amy) S. Xu  
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Intellectual Property Department  
Suite 1500, 50 South Sixth Street  
Minneapolis, MN 55402-1498

EXAMINER
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PHILIPPE, GIMS S

ART UNIT	PAPER NUMBER
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2621

MAIL DATE	DELIVERY MODE
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10/03/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/780,154

Applicant(s)

LEE ET AL.

Examiner

Gims S. Philippe

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 27 and 28 is/are allowed.
- 6) ☒ Claim(s) 1,2,14,15,29,31 and 32 is/are rejected.
- 7) ☒ Claim(s) 3-9,11-13,16-26 and 30 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 7/2/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

### **DETAILED ACTION**

This is a first office action in response to application no. 10/780,154 filed on February 17, 2004 in which claims 1-32 are presented for examination.

#### ***Abstract***

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

2. The abstract of the disclosure is objected to because it contains the phrase "the present invention provides". The Abstract can begin at "A 3D camera system ...".

Correction is required. See MPEP § 608.01(b).

#### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Lambert (US Patent no. 6750904).

Regarding claim 1, Lambert discloses a 3D camera system capable of generating a 3D image of an object from 3D input pictures of the object (See Lambert Fig. 1, and col. 4, lines 56-66).

5. Claims 1-2, and 14-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Burt (US Patent no. 5473364).

Regarding claim 1, Burt discloses a 3D camera system capable of generating a 3D image of an object from 3D input pictures of the object (See col. 5, lines 53-67).

As per claim 2, Burt discloses a 3D camera system for generating a 3D image of an object from 3D input pictures of the object (See Burt col. 5, lines 53-67), comprising at least one camera (See Burt figs. 1, 2a and 2b); a moving platform on which the at least one camera is adjustably mounted (See Burt figs. 1, 2a and 2b, col. 3, lines 41-45); a signal generator operable with the moving platform for generating a plurality of trigger signals for camera exposure to take the 3D input pictures of the object at predetermined locations at precise intervals (See Burt col. 3, lines 51-60, lines 64-67 and col. 4, lines 1-6); and an image processor for processing the 3D input pictures to generate the 3D image of the object (See col. 5, lines 55-67).

As per claim 14, Burt discloses a system of constructing a 3D image of a moving 3D object, comprising two cameras (See Burt figs. 2, 4a, 4b); a moving platform having two separable pieces on which the two cameras are adjustably mounted, respectively (See Burt figs. 2, 4a, 4b, col. 3, lines 32-40, col. 5, lines 40-49); a signal generator operable with the moving platform for generating a plurality of trigger signals for camera exposure to take 3D pictures of the moving 3D object at predetermined locations at precise intervals (See Burt col. 5, lines 53-67, and col. 6, lines 1-4); and an image processor for processing the 3D pictures to generate the 3D image of the moving 3D object (See col. 4, lines 55-66, col. 5, lines 49-67 and col. 6, lines 1-4).

As per claim 15, Burt further discloses a system wherein at each point in a time sequence, the pictures taken from the two cameras are captured simultaneously, representing multiple time sequenced left eye and right eye views, whereby each captured pair can be viewed by left eye and right eye simultaneously via a lenticular lens/barrier viewing screen, so that human eyes can see stereo-pair images.

6. Claims 29, 31, and 32 are rejected under 35 U.S.C. 102(b) as being anticipated by Lipton (US Patent no. 4418993).

As per claim 29, Lipton discloses a camera trigger circuit for controllably triggering operation of a moving camera of a 3D camera system which generates a 3D image of an object from 3D pictures of the object (See Lipton col. 3, lines 45-60), comprising a position sensor for detecting positions where the 3D pictures of the object are taken along a path of the moving camera (See Lipton col. 10, lines 1-7); and a camera pre-focus/shutter trigger pulse generator for generating a pulse for pre-focusing the moving camera before triggering shutter of the moving camera (See Lipton col. 10, lines 7-19). The applicant should note that the sensing of the focus setting will generate the "pre-focus/shutter pulse".

As per claims 31-32, Lipton further discloses the same circuit wherein the position sensor comprises an optical encoder and a programmable divider to move the moving

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camera at intervals (See Lipton col. 2, lines 39-62); and a stepper motor to move the moving camera to predetermined locations (See Lipton col. 9, lines 18-30).

7. Claims 3-9, 11-13, 16-26, and 30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. Claims 27-28 are allowed.

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lambert (US Patent no. 6750904) teaches camera system for three dimensional images and video.

Schoolman (US Patent no. 4559555) teaches stereoscopic remote viewing system.

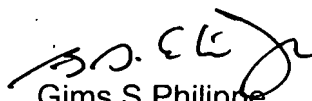
Palm et al. (US Patent no. 6326995) teaches methods and apparatus for zooming during capture and reproduction of 3-dimensional images.

Aliaga et al. (US Patent Application Publication no. 2005/0018058 A1) teaches method and system for reconstructing 3D interactive walkthrough of real-world environments.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gims S. Philippe whose telephone number is (571) 272-7336. The examiner can normally be reached on M-F (10:30-7:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dastouri Mehrdad can be reached on (571) 272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Gims S Philippe  
Primary Examiner  
Art Unit 2621

GSP

September 28, 2007